

REMARKS

Claim 39 has been amended. No claims have been canceled or added as part of this Reply. Accordingly, claims 8-39 are currently pending in the instant Patent Application.

A. Claim Rejections

Section 103(a) Rejections

In responding to the Examiner's prior art rejections, Assignee here only discusses the patentability of the independent claims (*i.e.*, claims 8, 23, 31 and 39). As the Examiner will appreciate, should these independent claims be patentable over the prior art, dependent claims would also necessarily be patentable. Accordingly, Assignee does not separately discuss the patentability of the dependent claims, although Assignee reserves the right to do so.

The Examiner has rejected claims 8-39 under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Publication 2003/0011637 to Boudier ("Boudier") in view of U.S. Publication 2002/0109682 to Nash et al. ("Nash") U.S. Publication 2005/0041031 A1 to Diard ("Diard").

Boudier

Boudier is directed to optimization of a scene graph. Boudier's scene graph is defined as "[t]he ***nodes of a scene graph represent features of the scene, such as physical objects and their attributes (e.g., colors and textures). The edges of a scene graph represent associations between the connected nodes.*** A node representing an object for example, may be connected to a node representing a texture for that object." Boudier at ¶ 1 (emphasis added). Boudier further clarifies this definition with "[a]n example of a scene graph is shown in **Fig. 1**. Scene graph **100** represents a house. The house is identified with root node **110**. The house includes a number of components, such as door **120**, roof **130**, and aggregate walls **140**. Individual walls

150 through **180** are associated with aggregate walls **140**. Each wall can have some number of attributes. For example, wall **180** is shown having texture **190**.” Boudier at ¶ 1.

Nash

Nash is directed to “[a] memory management system [which] provides microcode instructions that are divided into multiple tuned phases and stored as separate modules inside a phase code depository ... The ability to select interchangeable phase modules to implement a desired mode reduces microcode memory requirements and allows easy integration and reuse of previously developed features among different games and other graphics software developers without having to rely on the type of platform.” Nash at Abstract.

Claim 8

Independent claim 8 is directed to a method of creating an image with the image represented by an image graph comprising one or more GPU programs and inputs and outputs from those programs. The graph of the instant claims is further described in the Specification at least at ¶¶ 36-41. However, the graph disclosed in Boudier does not have anything to do with programs and inputs/outputs to programs. The nodes in Boudier’s graph represent features such as physical objects and attributes such as colors. The edges in Boudier’s graph represent associations. This is a fundamentally different kind of graph from what is recited in Independent claim 8. In fact, the only thing in common between the disclosed graph of Boudier and the graph of the instant specification is that they both are used in the very common manner of representing associations between things.

The Examiner admits “Boudier fails to specifically teach of **wherein the node(s) are program(s) and wherein executing the scene graph yielding a rendered image**.” Office Action dated 09 April 2009 at p. 4. The Examiner asserts that Nash discloses this element and that Figure 6 “shows phase modules (nodes) of processing and each node comprises a specific program code to conduct the function

within said node in a sequence.” Office Action dated 09 April 2009 at p. 4. Apparently the Examiner is asserting that Nash’s phase modules can be interpreted as disclosing the claimed nodes of Assignee’s image graph. However, Nash is silent as to a graph where the nodes correspond to programs. In fact, Nash does not disclose a graph or a node anywhere at any time.

The combination of Boudier and Nash cannot disclose the claimed graph because Boudier’s graph is fundamentally different from the claimed graph and Nash merely discloses that separate modules are selected from a phase code depository and loaded into a microcode memory for execution in a phase sequence. *See* Nash at Abstract. Further, there seems to be no logical method by which one could modify Boudier to arrive at the claimed invention – without the use of hindsight. Further, modifying Boudier as the Examiner proposes vitiates Boudier for its intended purpose (another indication that it is hindsight and not technical similarity that supports the Examiner’s allegation). Therefore, Boudier fails as a primary reference and either alone or in combination with the proposed use of Diard and Nash, cannot render claim 8 obvious. As a consequence, the Examiner has failed to make a *prima facie* case of obviousness under 35 U.S.C. 103 or established Patent Office examining guidelines. Assignee respectfully requests the Examiner withdraw this rejection.

Furthermore, each of claims 9-22 depend from independent claim 8. Because Boudier alone or in combination with Diard does not disclose each and every limitation of independent claim 8, each of claims 9-22 are patentable over the cited art. Assignee respectfully requests the Examiner withdraw this rejection.

Claim 23

The Examiner asserts that independent claim 23 is similar in scope to the combination of claims 8, 11, 14, 17, and 20 and incorporates the rationale for rejecting those claims into the rejection of claim 23. *See* Office Action dated 09 April 2009 at p. 12. The arguments above, regarding the fundamental difference between the combination of Boudier and Nash with respect to claim 8, apply with equal force here.

Additionally the Examiner specifically asserts in his rejection of independent claim 23 that "Boudier teaches ... creating a representation of said rendered polygon comprising a root program and its relationship with other programs, their inputs and outputs." Office Action dated 09 April 2009 at p. 12. However, Boudier is perfectly silent as to any kind of relationship between a program and other programs. The relationship disclosed in Boudier is an association between a physical object and an attribute of that physical object. The leap between what Boudier teaches and what the Examiner alleges is not supported by the reference itself. As noted above, modifying Boudier as the Examiner proposes vitiates Boudier for its intended purpose – a clear indication that it is hindsight and not any rational application of the reference itself which is being applied.

Boudier therefore fails as a primary reference and either alone or in combination with the proposed use of Nash and Diard, cannot render claim 23 obvious. As a consequence, the Examiner has failed to make a *prima facie* case of obviousness under 35 U.S.C. 103 or established Patent Office examining guidelines. Assignee respectfully requests the Examiner withdraw this rejection.

Furthermore, each of claims 24-30 depend from independent claim 23. Because Boudier alone or in combination with Diard does not disclose each and every limitation of independent claim 23, each of claims 24-30 are patentable over the cited art. Assignee respectfully requests the Examiner withdraw this rejection.

Claim 31

The Examiner asserts that independent claim 31 is similar in scope to claim 23 and incorporates the rationale for rejecting that claim into the rejection of claim 31. See Office Action dated 09 April 2009 at p. 16. The arguments above, regarding the fundamental difference between Boudier vis-à-vis claims 8 and 23, apply with equal force here.

As shown above, Boudier fails as a primary reference and either alone or in combination with the proposed use of Nash and Diard, cannot render claim 31 obvious. As a consequence, the Examiner has failed to make a *prima facie* case of obviousness

under 35 U.S.C. 103 or established Patent Office examining guidelines. Assignee respectfully requests the Examiner withdraw this rejection.

Furthermore, each of claims 32-38 depend from independent claim 31. Because Boudier alone or in combination with Nash or Diard does not disclose each and every limitation of independent claim 31, each of claims 32-38 are patentable over the cited art. Assignee respectfully requests the Examiner withdraw this rejection.

Claim 39

Independent claim 39 recites a computer readable medium to perform the methods recited in each of claims 8, 20, 23 or 31. Since each of these claims are clearly patentable over the cited art as discussed above, so too is claim 39. Assignee respectfully requests the Examiner withdraw this rejection.

Comment regarding rejection of claim 20

In rejecting dependent claim 20 the Examiner specifically states that "optimizations are performed on DODs forming new DODs." Office Action dated 09 April 2009 at p. 10. Assignee does not understand this comment and directs the Examiner to ¶ 92 of the instant specification which explains that the "domain of definition of an image is a representation of all places in which the image is defined." As such, Assignee does not understand "optimizations are performed on DODs forming new DODs." Once clarified, Assignee will address any issue regarding claim 20 in detail.

Conclusion

This paper is intended to be a complete response to the above-identified Office Action. Assignee believes no fees are due. However if it is found that additional fees are due the Commissioner is authorized to deduct the necessary charges from Deposit Account: 501922/119-0041US.

Reconsideration of pending claims 8-39 in light of the above remarks is respectfully requested. If, after considering this Reply, the Examiner believes that a telephone conference would be beneficial towards advancing this case to allowance, the Examiner is strongly encouraged to contact the undersigned attorney at the number listed.

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